calpeda®

catalogue 60Hz

Edition North America Market

calpeda®

INDEX

NM 60 Hz

Close Coupled Centrifugal Pumps
with threaded ports

calpeda®

Construction

Close-coupled, centrifugal pumps; electric motor with extended shaft directly connected to the pump.
- Single-impeller
- Two back-to-back impellers (with axial thrust balancing).

Connections: threaded ports NPT.

Applications

- For clean liquids without abrasives, which are, non-aggressive for the pump materials (solids content up to 0.2%).
- For water supply.
- For heating, air-conditioning, cooling and circulation plants.
- For civil and industrial applications.
- For irrigation.

Operating conditions

Liquid temperature from 14 °F to 194 °F.
Ambient temperature up to 104 °F.
Total suction lift up to 23 ft.
Maximum permissible working pressure up to 145 psi (232 psi for pumps NMD).
Continuous duty.

Motor

2-pole induction motor, 60 Hz (n ≈ 3450 rpm).
Three-phase 230/460 V.
Single-phase 115/230 V, 115 V, 230 V.
Insulation class F.
Protection IP 44.

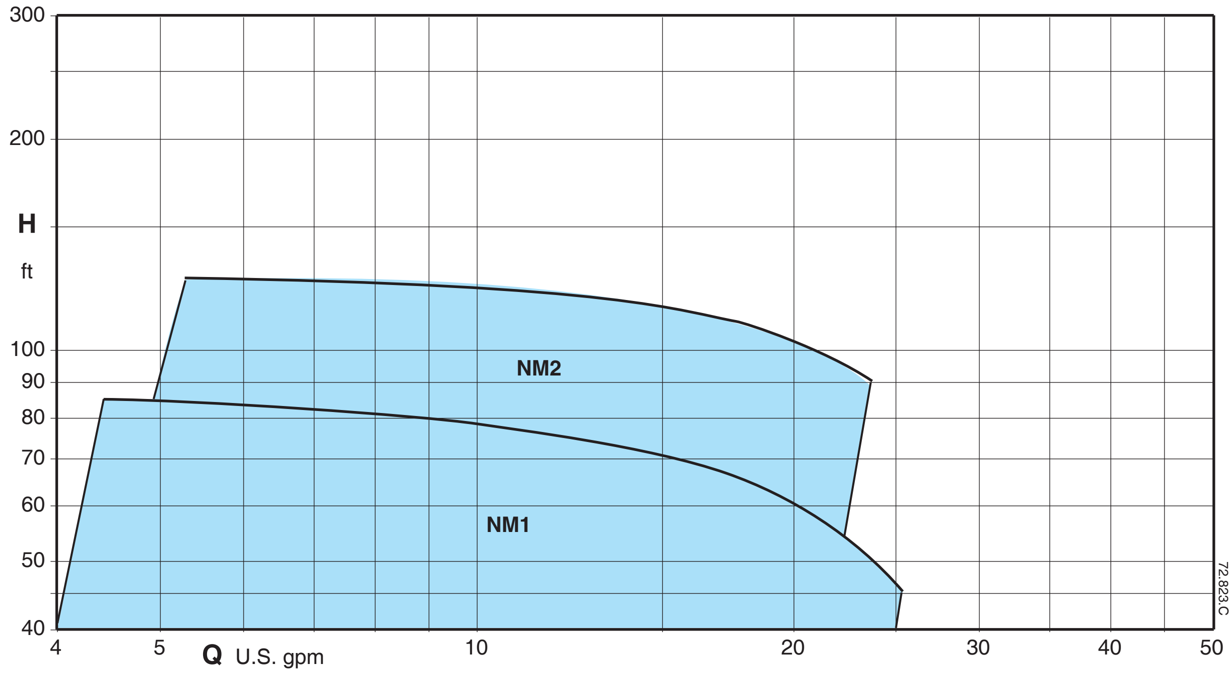
Special features on request

- Other voltages.
- Special mechanical seal
- Higher or lower liquid or ambient temperatures.

Materials

Components	Material
Pump casing Lantern bracket	Cast iron GJL 200 EN 1561
Impeller	Brass CW510L (lead free public LAW 111-380)
Shaft	Cr steel AISI 430
	Cr Ni steel AISI 303 1 - 1.5 - 2.5 - 3 HP
Mechanical seal	Carbon - Ceramic - NBR

Performance range n ≈ 3450 rpm



NM 60 Hz

Close Coupled Centrifugal Pumps
with threaded ports

calpeda®

Performance n ≈ 3450 rpm

115 V 1~	230 V 1~	115/230 V 1~	230/460 V 3~	P2 HP	H ft	45	50	55	60	65	70	75	80	85
NM1A 03A16S	**NM1A 03C16S**		**NM1A 03H36S**	0.33	**Q**	23	19	17	14	10	6			
NM1S 05A16S	**NM1S 05C16S**		**NM1S 05H36S**	0.5	US gpm	26	26	24	23	21	19	15	11	6

115 V 1~	230 V 1~	115/230 V 1~	230/460 V 3~	P2 HP	H ft	65	70	75	80	85	90	95	100	105	110	115
NM2B 05A16S	**NM2B 05C16S**	**NM2B 05F16S**	**NM2B 05H36S**	0.5	**Q**	21	20	16	12	7						
NM2A 07A16S	**NM2A 07C16S**	**NM2A 07F16S**	**NM2A 07H36S**	0.75	US gpm						23	20	17	15	11	7

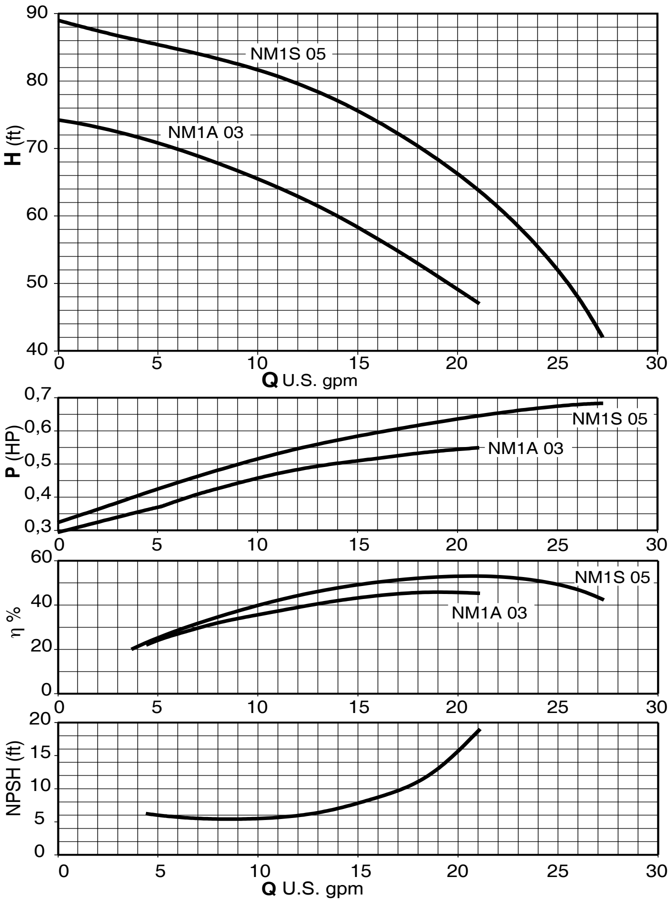
P2 Rated motor power output.
Tolerances according to UNI EN ISO 9906:2012
H Total head in ft.
* Maximum suction lift 6.5-10 ft.

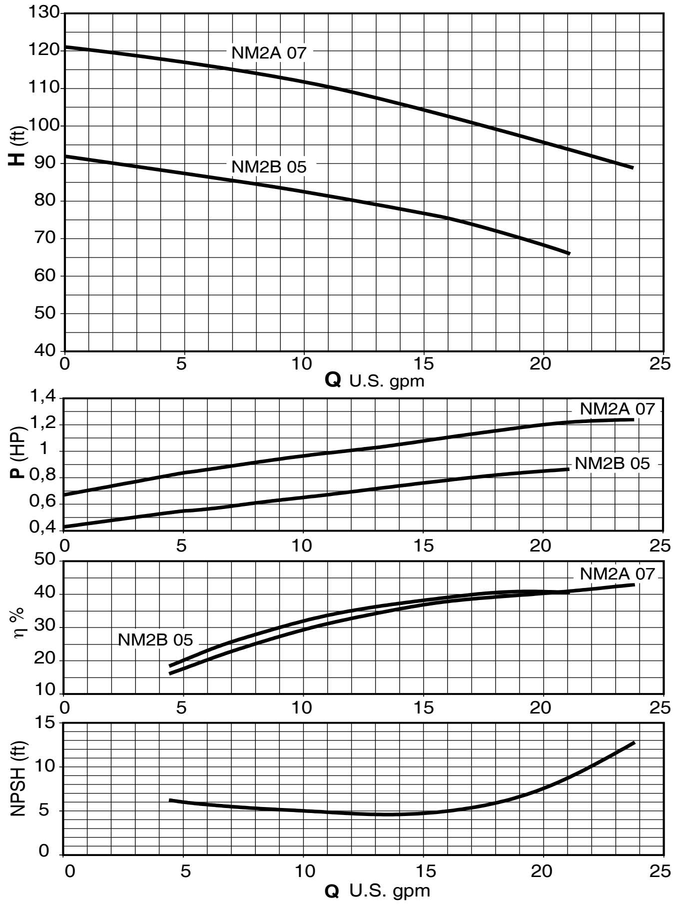
Rated currents

	P2	3~		1~			
	HP	230/460V IN A	IA/IN	115 V IN A	230 V IN A	115/230V IN A	IA/IN
NM1A 03	0.33	1.9/1.2	3.8	7.4	3.7	-	2.7
NM1S 05	0.5	2.4/1.6	5.4	8.4	4.2	-	2.6
NM2B 05	0.5	2.6/1.6	3.7	10.8	5.4	8.8/4.5	3.1
NM2A 07	0.75	3.8/2.3	6.8	12.4	6.2	11.9/6.1	3.5

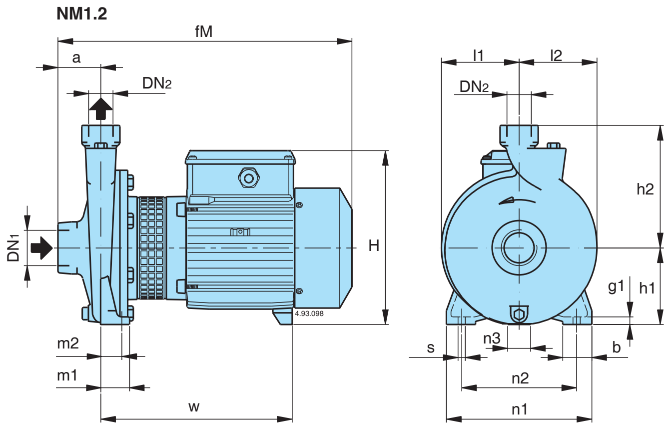
P2 Rated motor power output.
IA/IN D.O.L. starting current / Rated current

Characteristic curves n ≈ 3450 rpm





Dimensions and weights



TYPE	DN1	DN2	in															
	NPT		a	fM	h1	h2	H	m1	m2	n1	n2	n3	b	s	l1	l2	w	g1
NM1A 03 - NM1S 05	1	1	1.57	10.28	3.15	5.2	6.93	1.57	1.26	6.69	5.51	0.67	1.38	0.37	3.03	3.19	6.73	0.39
NM2B 05 - NM2A 07	1	1	1.77	12.01	3.74	5.91	8.15	1.57	1.26	7.48	6.3	0.67	1.38	0.37	3.43	3.54	7.99	0.39

TYPE	lb	
	3~	1~
NM1A 03	18.9	19.1
NM1S 05	20.2	20.5
NM2B 05	28.8	30.8
NM2A 07	31.2	33.2

Features

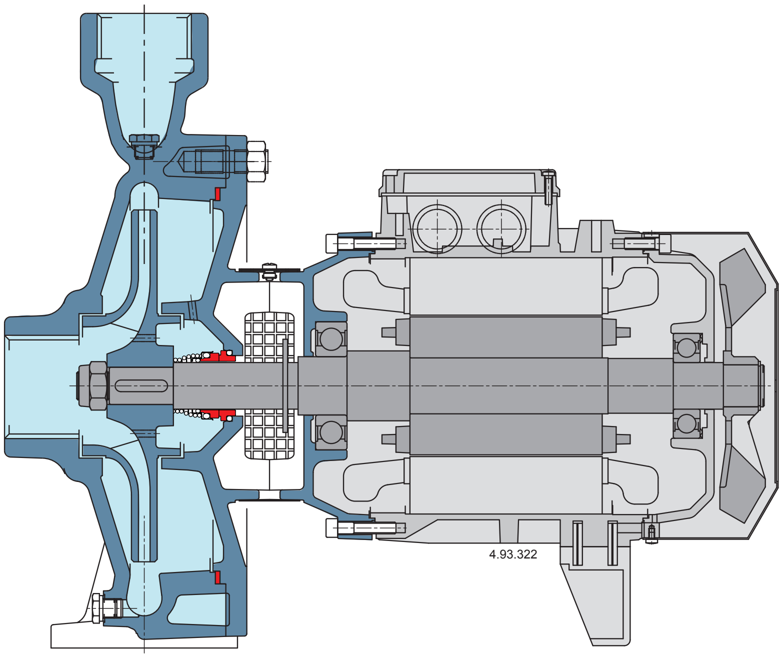
Compact Design
The compact design allows for easy installtion even in confined spaces.

Robustness
The mechanical structure of the hydraulic parts in contact with the pumped liquid are dimensioned to guarantee the maximum resistence to mechanical stress.

A unique design
The lantern bracket design prevents contact with the pumps rotating parts, providing protection to the end user whilst allowing for inspection of the mechanical seal.

Reliability
The bearing and shaft are designed to ensure the reduction of the stress, providing high reliability under all operating conditions.

Single-impeller

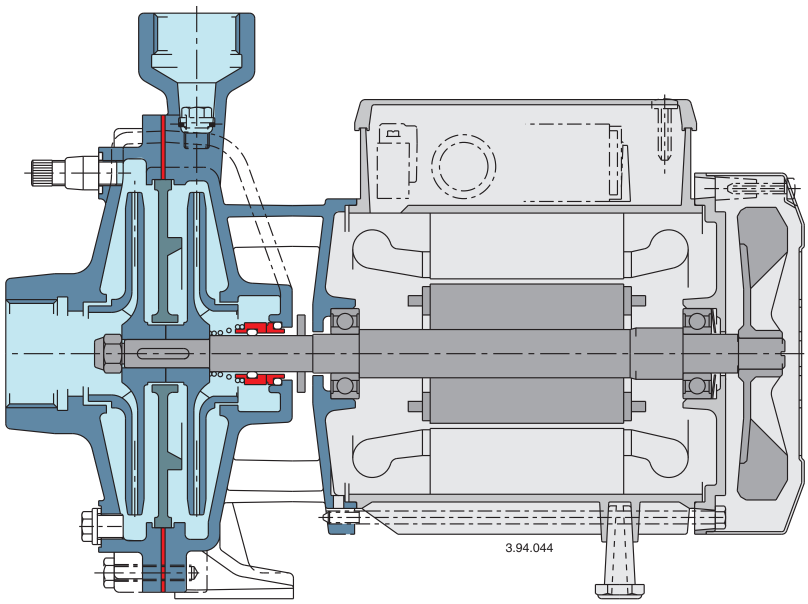


Flexibility
The option to choose between cast iron and bronze materias for the hydraulic parts in contact with the pumped liquid allows two back-to-back impellers series pumps to be selected for use with different types of liquids.

Robustness
The mechanical structure of the hydraulic parts in contact with the pumped liquid are dimensioned to guarantee the maximum resistence to mechanical stress.

Reliability
The bearing and shaft are designed to ensure the reduction of the stress, providing high reliability under all operating conditions.

Two back-to-back impellers



CT 60 60 Hz

Peripheral Pumps
with turbine impeller

calpeda®

Construction

Close-coupled peripheral pumps (regenerative pumps) with turbine impeller.

Connections: threaded ports NPT.

Applications

For clean liquids without abrasives, without suspended solids,non-explosive, non-aggressive for the pump materials.
For increasing network pressure (follow local specifications).
For the reduced dimensions, these pumps are very well suitable to be mounted in cooling and air-conditioning machines and equipments, circulation, boiler feed.

Operating conditions

Liquid temperature up to 140 °F..
Ambient temperature up to 104 °F.
Total suction lift up to 23 ft.
Continuous duty.

Motor

2-pole induction motor, 60 Hz (n ≈ 3450 rpm).
Three-phase 230/460 V.
Single-phase 115 V, 230 V, with thermal protector.
Capacitor inside the terminal box.

Insulation class F.
Protection IP 44.

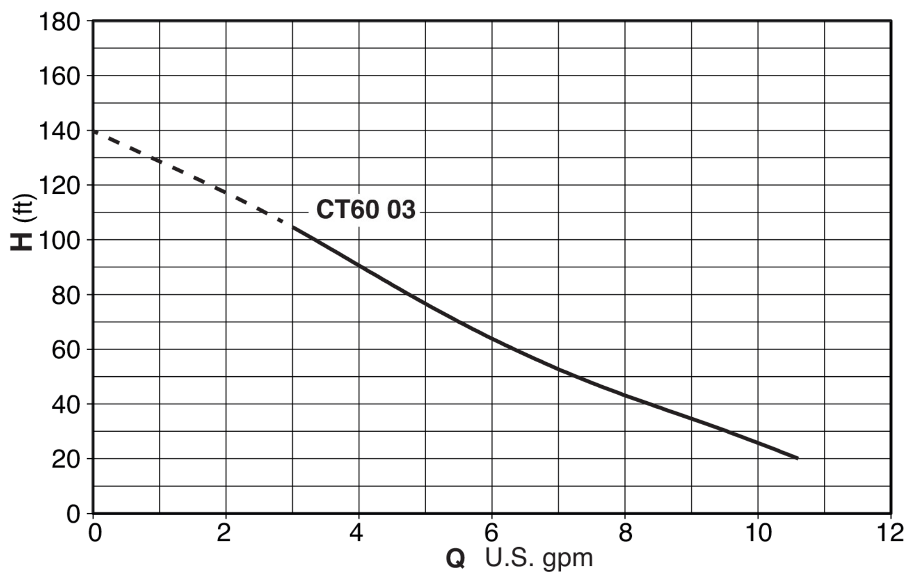
Special features on request

- Other voltages.
- Special mechanical seal
- Higher or lower liquid or ambient temperatures.

Materiales

Components	Material
Pump casing	Cast iron GJL 200 EN 1561
Casin cover motor side	Brass CW510L (lead free public LAW 111-380)
Impeller	Brass CW510L (lead free public LAW 111-380)
Shaft	Chrome steel AISI 430
Mechanical seal	Carbon - Ceramic - NBR

Performance range n ≈ 3450 rpm



Performance n ≈ 3450 rpm

115 V 1~	230 V 1~	230/460 V 3~	P2 HP	H ft	25	35	55	75	95	110						
CT60 03A16S	**CT60 03C16S**	**CT60 03H36S**	0.33	**Q** US gpm	10	8.8	6.9	5.2	3.7	2,6						

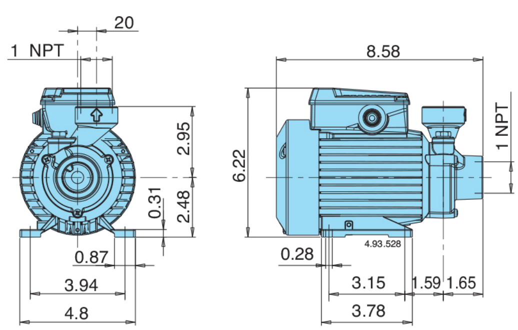
P2 Rated motor power output. Tolerances according to UNI EN ISO 9906:2012 **H** Total head in ft.

Rated currents

	P2	3~		1~		
	HP	230/460V IN A	IA/IN	115 V IN A	230 V IN A	IA/IN
CT60 03	0.33	1.8/1.1	3.2	5.9	3.1	2.5

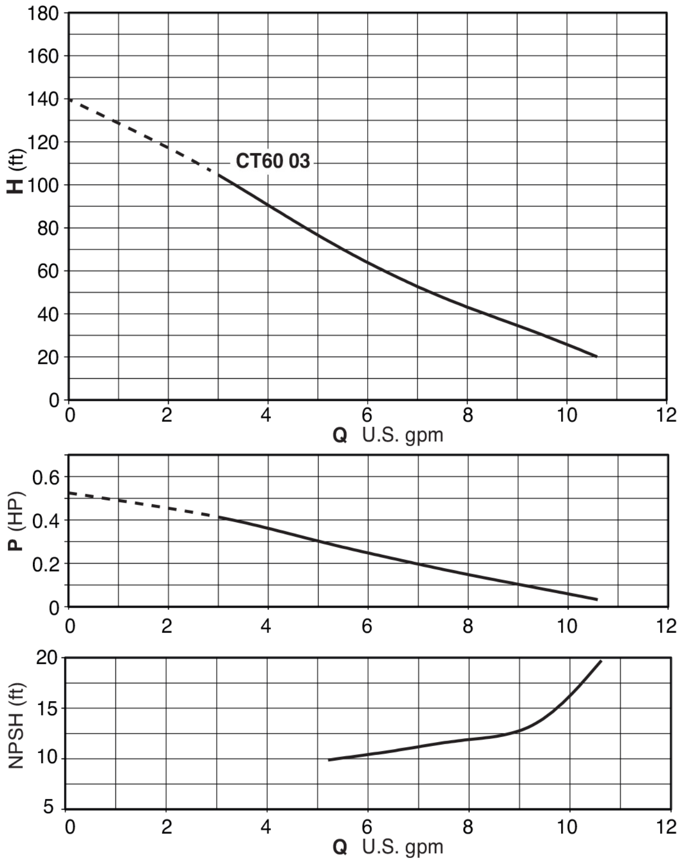
P2 Rated motor power output.
IA/IN D.O.L. starting current / Rated current

Dimensions and weights

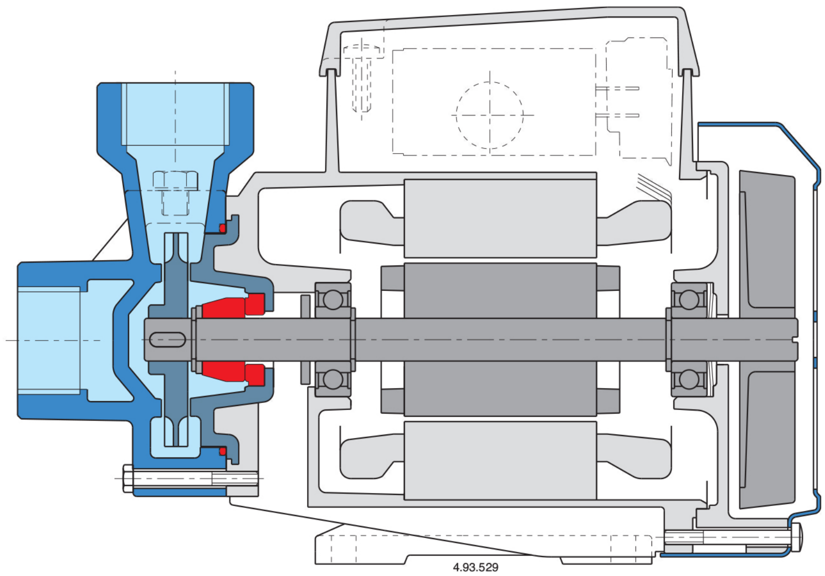


TYPE	lb 3~	lb 1~
CT 60 03	10.8	11

Characteristic curves n ≈ 3450 rpm



Features



Reliability

The bearing and shaft are designed to ensure the reduction of the stress, providing high reliability under all operating conditions.

Optimized hydraulics

The pump hydraulics are designed to ensure high performance and consistency of performance.

CT, T, TP 60 Hz

Peripheral Pumps
with turbine impeller

calpeda®

Materiales

Components	Material
Pump casing	Cast iron GJL 200 EN 1561
Lantern bracket	Cast iron GJL 200 EN 1561 (CT 61 excluded)
Casin cover	Brass CW510L (lead free public LAW 111-380)
	Cast ironGJL 200 EN 1561 for T 76, TP 80
Impeller	Brass CW510L (lead free public LAW 111-380)
Shaft	Chrome-nickel steel AISI 303 for T 76, Tp 80
	Chrome steel AISI 430 for CT, T 61-65-70
Mechanical seal	Carbon - Ceramic - NBR

Construction

Close-coupled peripheral pumps (regenerative pumps) with turbine impeller.

Connections: threaded ports NPT.

Applications

For clean liquids without abrasives, without suspended solids,non-explosive, non-aggressive for the pump materials. For increasing network pressure (follow local specifications). For the reduced dimensions, these pumps are very well suitable to be mounted in cooling and air-conditioning machines and equipments, circulation, boiler feed.

Operating conditions

Liquid temperature from 14 °F to 194 °F (up to 140 °F for CT61).
Ambient temperature up to 104 °F.
Total suction lift up to 23 ft.
Continuous duty.

Motor

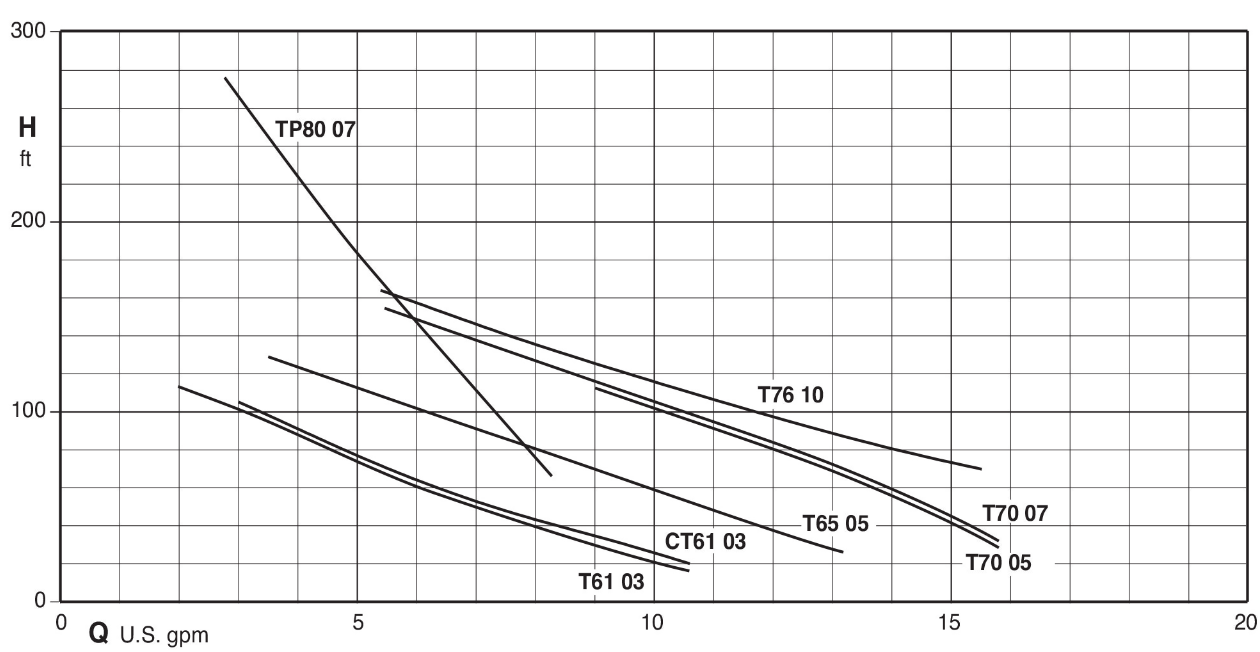
2-pole induction motor, 60 Hz (n ≈ 3450 rpm).
Three-phase 230/460 V.
Single-phase 115 V, 230 V, with thermal protector.
Capacitor inside the terminal box.

Insulation class F.
Protection IP 44.

Special features on request

- Other voltages.
- Special mechanical seal
- Higher or lower liquid or ambient temperatures.

Performance range n ≈ 3450 rpm



CT, T, TP 60 Hz

Peripheral Pumps
with turbine impeller

calpeda®

Performance n ≈ 3450 rpm

115 V 1~	230 V 1~	230/460 V 3~	P2 HP	H ft	15	25	35	55	75	95	110	115	130	135	155	164
CT61 03A16S	**CT61 03C16S**	**CT61 03H36S**	0.33			10	8.8	6.9	5.2	3.7	2,6					
T61 03A16S	**T61 03C16S**	**T61 03H36S**	0.33		10.7	9.5	8.4	6.5	5	3.5	2.3	2				
T65 05A16S	**T65 05C16S**	**T65 05H36S**	0.5	**Q**		13.3	12.3	10.4	8.5	6.5	5.2	4.8	3.5			
T70 05A16S	**T70 05C16S**	**T70 05H36S**	0.5	US gpm			15.4	14	12.4	10.7	9.4	8.7				
T70 07A16S	**T70 07C16S**	**T70 07H36S**	0.75				15.7	14.3	12.8	11	9.7	9	8	7	5.4	
-	**T76 10C16S**	**T76 10H36S**	1						14.9	12.4	10.7	10.2	8.6	8	6	5.3

115 V 1~	230 V 1~	230/460 V 3~	P2 HP	H ft	65	85	105	125	145	165	185	205	225	245	265	
TP80 07A16S	**TP80 07C16S**	**TP80 07H36S**	0.75	**Q**	8.3	7.7	7.1	6.6	6	5.5	5	4.4	3.9	3.4	3	
				US gpm												

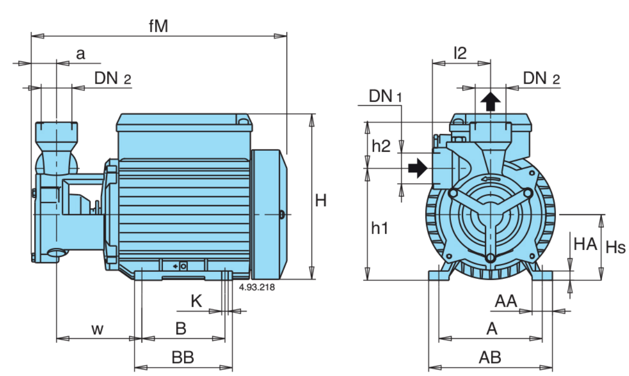
P2 Rated motor power output. Tolerances according to UNI EN ISO 9906:2012 **H** Total head in ft. * Maximum suction lift 6.5-10 ft.

Rated currents

	P2	3~		1~		
	HP	230/460V IN A	IA/IN	115 V IN A	230 V IN A	IA/IN
CT61 03	0.33	1.8/1.1	3.2	5.9	3.1	2.5
T61 03	0.33	1.8/1.1	3.2	5.9	3.1	2.5
T65 05	0.5	2.7/1.7	4.8	8.4	4.2	2.6
T70 05	0.5	3.1/1.8	8.5	11	5.5	4
T70 07	0.75	3.8/2.3	6.8	14.4	7.2	3
T76 10	1	5.7/3.3	4.9	-	8.9	2.9
TP80 07	0.75	4.1/2.6	4.8	13	7	2.9

P2 Rated motor power output.
IA/IN D.O.L. starting current / Rated current

Dimensions and weights



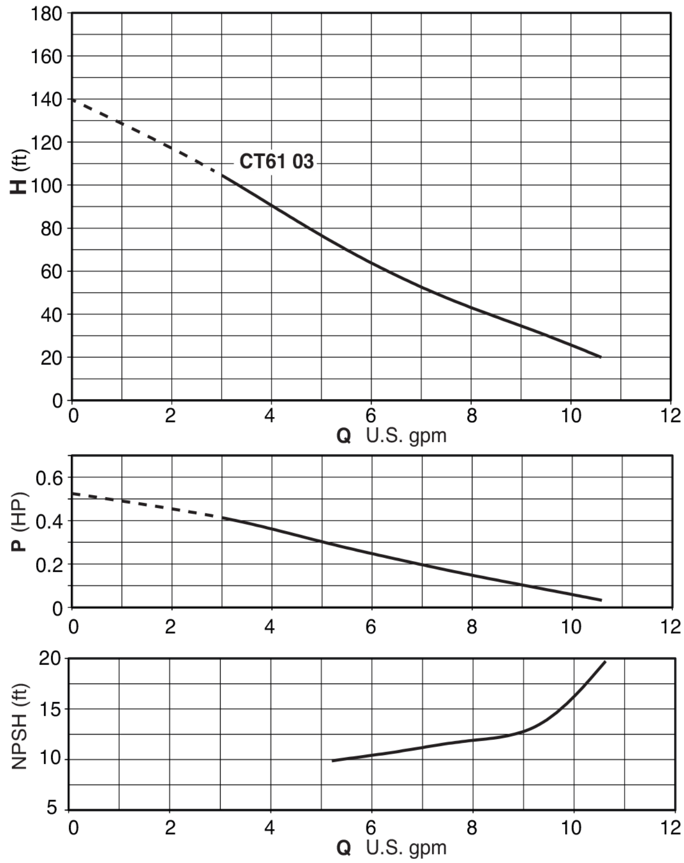
TYPE	DN1	DN2	in															lb	
	NPT		a	fM	Hs	h2	h1	H	BB	B	AB	A	AA	K	l2	w	HA	3~	1~
CT61 03	1	1	0.87	7.8	2.48	1,77	4.25	6,3	3.78	3.15	4.8	3.94	0.87	0.28	2.28	1.59	0.31	10,1	9.9
T61 03	1	1	0.94	9.61	2.48	2,56	4.25	6,3	3.78	3.15	4.8	3.94	0.87	0.28	2.28	3.15	0.31	12,3	12,1
T65 05	1	1	0.94	9.61	2.48	2,56	4.25	6,3	3.78	3.15	4.8	3.94	0.87	0.28	2.28	3.15	0.31	15.9	15.5
T70 05 - T70 07	1	1	0.94	10.94	2.8	1,97	4.76	7,17	4.17	3.54	5.28	4.41	0.87	0.28	2.48	3.66	0.39	23,1	21.1
T76 10	1 1/4	1 1/4	1.02	13.31	3.15	2,2	5.35	7,99	4.61	3.94	6.1	4.92	1.18	0.35	3.15	4.13	0.39	38.1	36.1
TP80 07	3/4	3/4	1.06	13.07	3.15	1,38	5.31	7,99	4.61	3.94	6.1	4.92	1.18	0.35	2.36	4.09	0.39	34.8	31.9

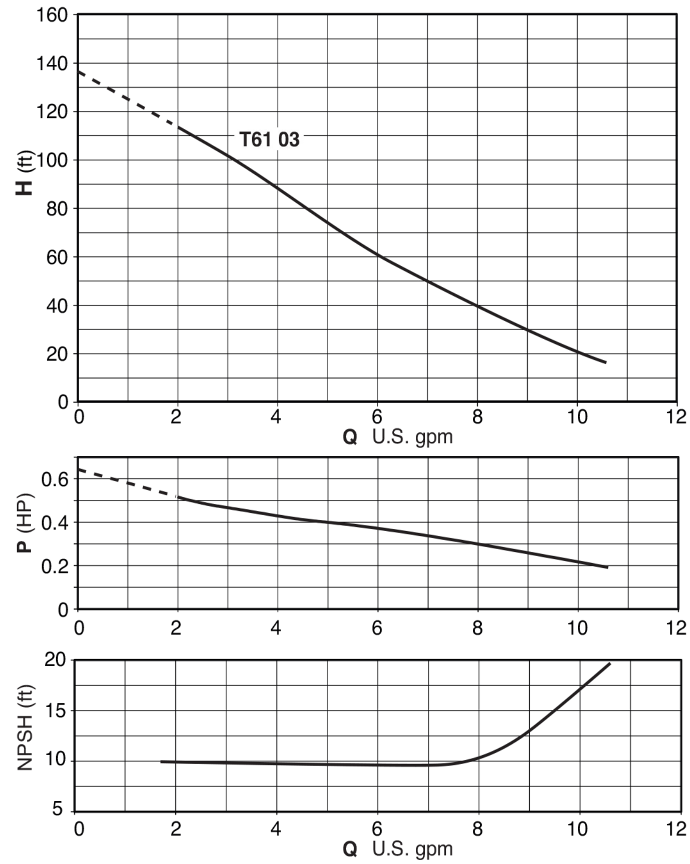
CT, T, TP 60 Hz

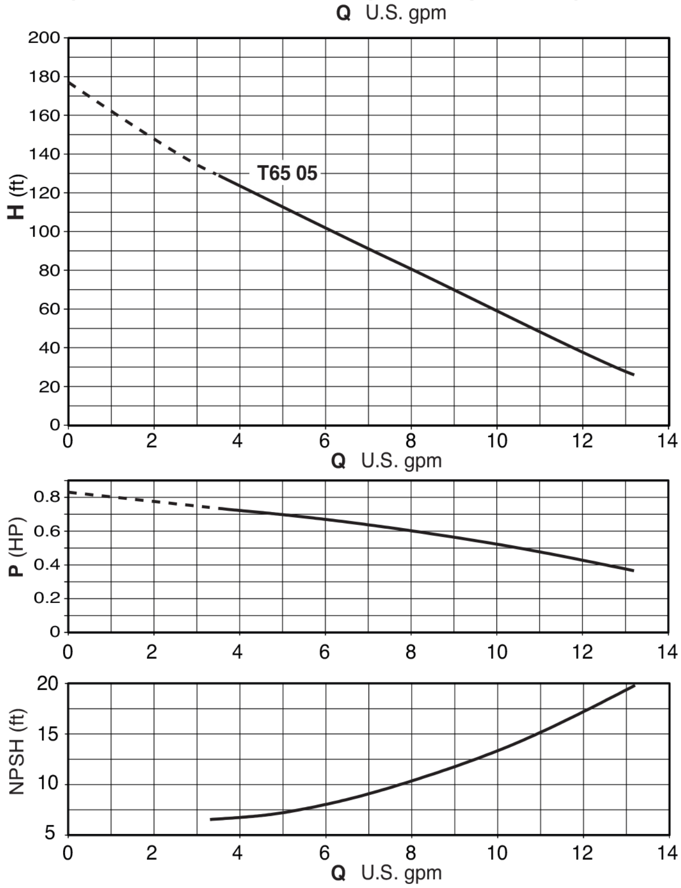
Peripheral Pumps
with turbine impeller

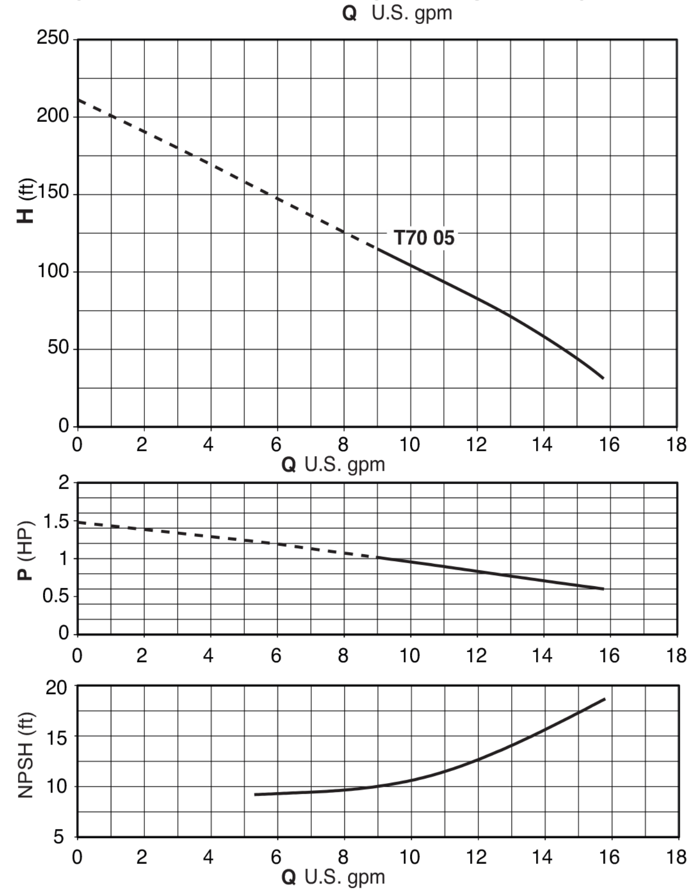
calpeda

Characteristic curves n ≈ 3450 rpm

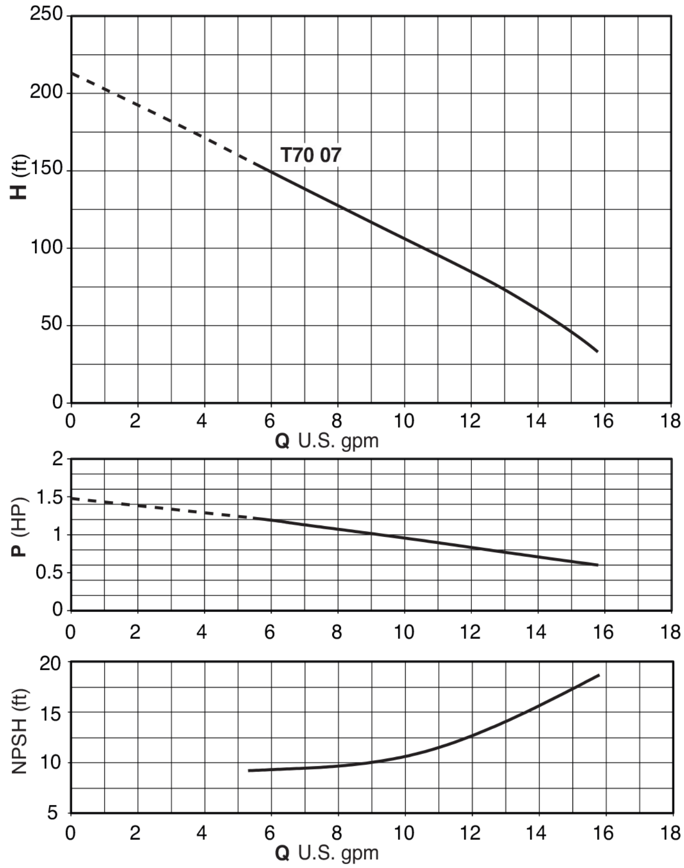


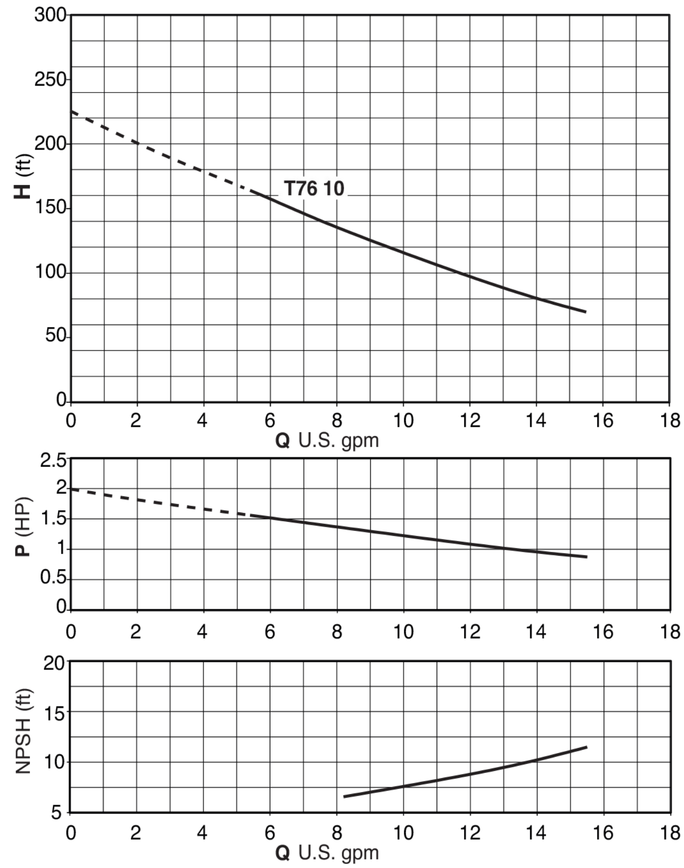


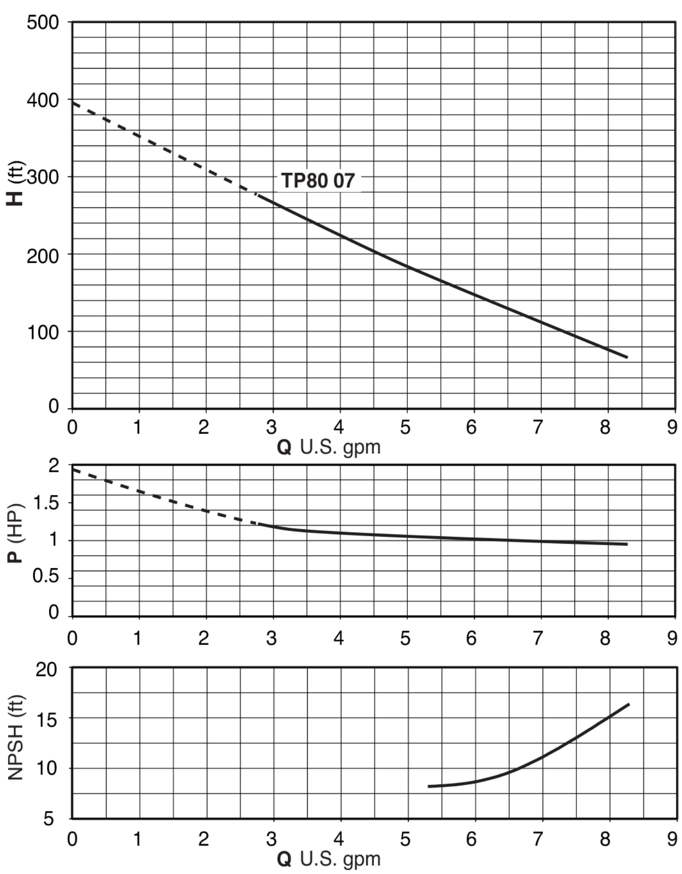




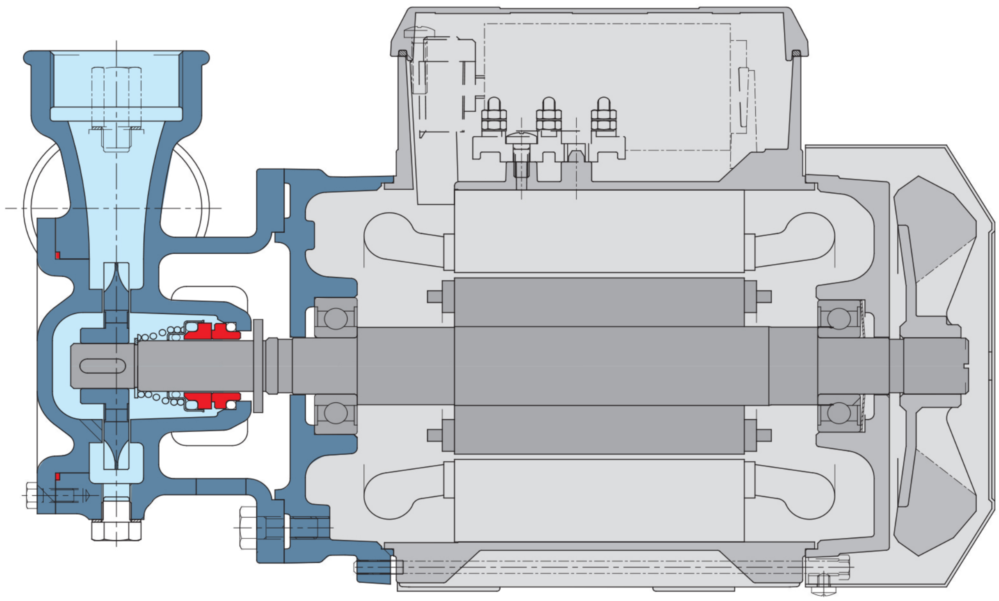
Characteristic curves n ≈ 3450 rpm







Features



Range
The high number of pumps in the range can meet the widest range of services required by the user.

Flexibility
The option to choose between cast iron and bronze materias for the hydraulic parts in contact with the pumped liquid allows CT-T-TP series pumps to be selected for use with different types of liquids.

Reliability
The bearing and shaft are designed to ensure the reduction of the stress, providing high reliability under all operating conditions.

Optimized hydraulics
The pump hydraulics are designed to ensure high performance and consistency of performance.

MXH 60 Hz Horizontal Multi-Stage Close Coupled Pumps

calpeda

Construction

Horizontal multi-stage close coupled pumps in **chrome-nickel stainless steel**.
Compact and robust construction, without protruding flange and with single-piece lantern bracket and base.
Single-piece barrel casing, with front suction port above pumps axis and radial delivery at top.
Filling and draining plugs on the middle of the pump, accessible from any side (like the terminal box).
Connections: threaded ports GAS.

Applications

For water supply.
For clean liquids, without abrasives, which are non-aggressive for stainless steel (with suitable seal materials, on request).
Universal pump, for domestic use, for civil and industrial applications, for garden use and irrigation.

Operating conditions

Liquid temperature: 5 °F to 230 °F.
Ambient temperature up to 104 °F.
Maximum permissible pressure in the pump casing: 116 psi.
Continuous duty.

Motor

2-pole induction motor, 60 Hz (n ≈ 3450 rpm).
Three-phase 230/460 V.
Single-phase 115/230 V, 115 V, 230 V.
Capacitor inside the terminal box.

Insulation class F.
Protection IP 44.

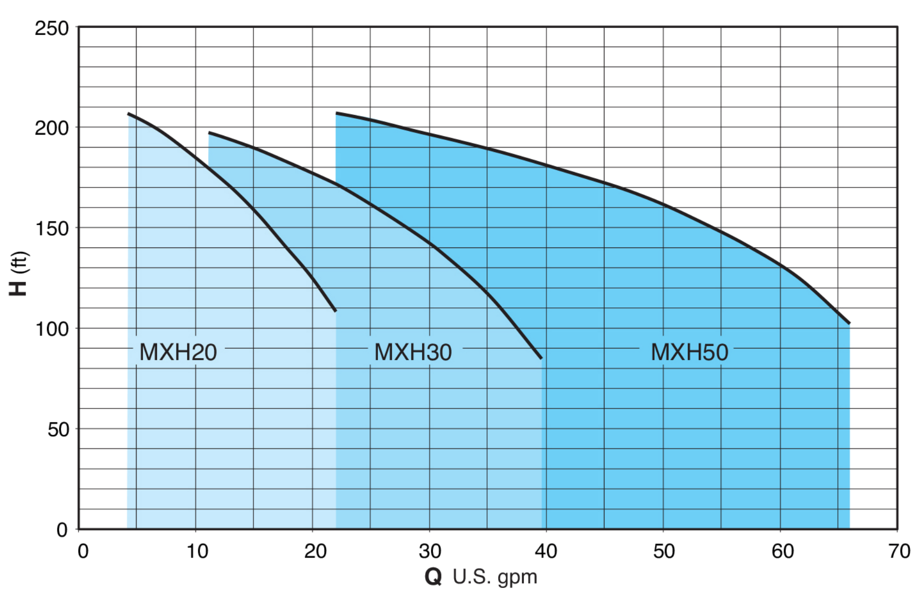
Special features on request

- Other voltages.
- Protection IP 55.
- Special mechanical seal
- Seal rings in FPM.
- Higher or lower liquid or ambient temperatures.

Materials

Component	Material
Pump casing	Chrome-nickel steel AISI 304
Stage casing	Chrome-nickel steel AISI 304
Wear ring	PTFE
Impeller	Chrome-nickel steel AISI 304
Casing cover	Chrome-nickel steel AISI 304
Spacer sleeve	Chrome-nickel steel AISI 304
Pump shaft	Chrome-nickel steel AISI 303
Plug	Chrome-nickel steel AISI 303
Mechanical seal with seat according to ISO 3069	Ceramic alumina, carbon, EPDM (Other materials on request)

Coverage chart n ≈ 3450 rpm



Technical data n ≈ 3450 rpm

115 V 1~	230 V 1~	115/230 V 1~	230/460 V 3~	P2 HP	H ft	20	25	30	35	40	45	50	60	70	80	90	100	110	120	140	160	180	200
MXH20 03A16S	**MXH20 03C16S**		**MXH20 03H36S**	0,33		25	21	18	16	13	9	4											
MXH20 05A16S	**MXH20 05C16S**	**MXH20 05F16S**	**MXH20 05H36S**	0,5	**Q**							23	20	18	14	11	5						
MXH20 07A16S	**MXH20 07C16S**	**MXH20 07F16S**	**MXH20 07H36S**	0,75	US gpm										22	20	18	17	15	10			
MXH20 10A16S	**MXH20 10C16S**		**MXH20 10H36S**	1													23	22	20	18	15	11	6

115 V 1~	230 V 1~	115/230 V 1~	230/460 V 3~	P2 HP	H ft	15	20	25	30	35	40	45	50	60	70	80	90	100	120	140	160	180	200
MXH30 03A16S	**MXH30 03C16S**		**MXH30 03H36S**	0,33		38	35	32	29	26	21	14											
MXH30 07A16S	**MXH30 07C16S**	**MXH30 07F16S**	**MXH30 07H36S**	0,75	**Q**						40	45	37	34	30	25	18						
MXH30 10A16S	**MXH30 10C16S**		**MXH30 10H36S**	1	US gpm									42	39	36	34	32	26	17			
	MXH30 15C16S		**MXH30 15H36S**	1,5												41	39	37	34	31	26	19	

115 V 1~	230 V 1~	115/230 V 1~	230/460 V 3~	P2 HP	H ft	15	20	25	30	35	40	45	50	60	70	80	90	100	120	140	160	180	200
MXH50 05A16S	**MXH50 05C16S**	**MXH50 05F16S**	**MXH50 05H36S**	0,5		73	64	59	55	52	46	36											
	MXH50 15C16S		**MXH50 15H36S**	1,5	**Q**								66	60	55	51	42	27					
			MXH50 25H36S	2,5	US gpm										69	64	60	56	49	35			
			MXH50 30H36S	3														67	62	57	51	41	27

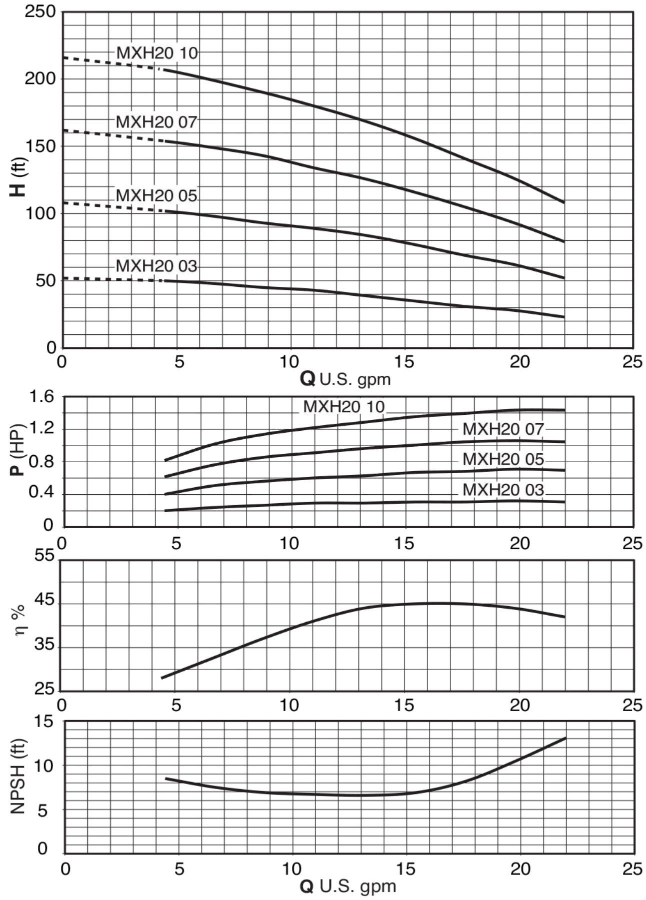
P2 Rated motor power output. Tolerances according to UNI EN ISO 9906:2012 **H** Total head in ft.

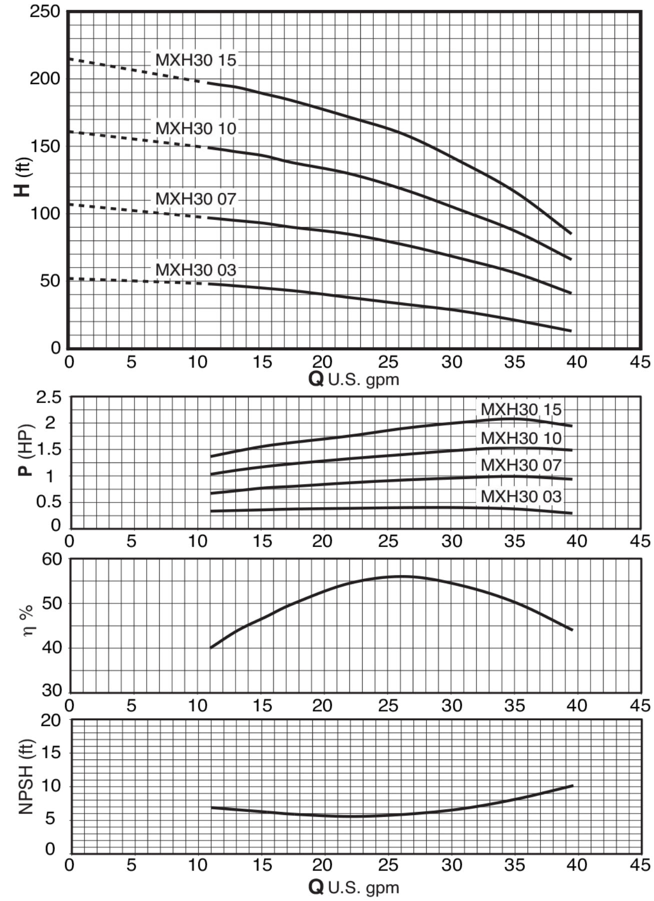
Rated currents

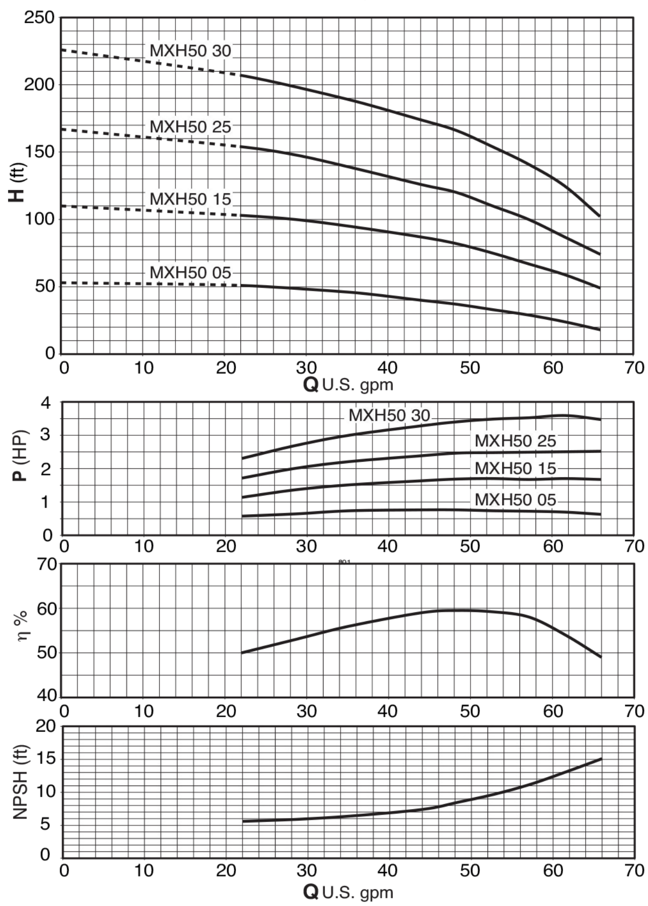
	P2	3~		1~			
	HP	230/460V IN A	IA/IN	115 V IN A	230 V IN A	115/230V IN A	IA/IN
MXH20 03	0.33	1.8/1.1	4	5.3	2,8	-	2.7
MXH20 05	0.50	2.6/1.6	3.7	10.8	5,4	8.8/4.5	3.1
MXH20 07	0.75	3.8/2.3	6.8	12.4	6,2	10.5/5.4	3.5
MXH20 10	1	5.5/3.2	5.5	-	8,5	-	2.8
MXH30 03	0.33	1.8/1.1	4	5.3	2,8	-	2.7
MXH30 07	0.75	3.8/2.3	6.8	12.4	6,2	10.5/5.4	3.5
MXH30 10	1	5.5/3.2	5.5	-	8,5	-	2.8
MXH30 15	1.5	8.3/4.8	5.4	-	10,6	-	3.8
MXH50 05	0.5	2.6/1.6	3.7	10.8	5,4	8.8/4.5	3.1
MXH50 15	1.5	8.3/4.8	5.4	-	10,6	-	3.8
MXH50 25	2.5	8.3/4.8	9	-	13,5	-	4.5
MXH50 30	3	9.9/5.7	7.3	-	-	-	-

P2 Rated motor power output.
IA/IN D.O.L. starting current / Rated current

Characteristic curves n ≈ 3450 rpm



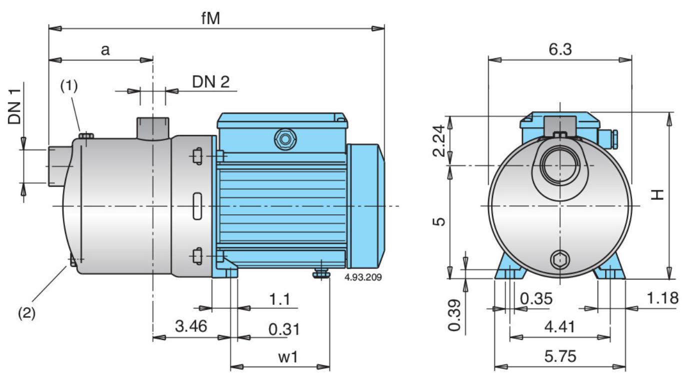


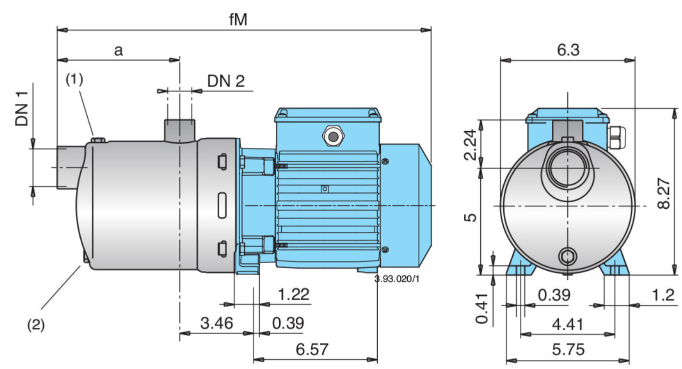


MXH 60 Hz Horizontal Multi-Stage Close Coupled Pumps

calpeda®

Dimensions and weights





TYPE	DN1	DN2	in				lb	
	ISO 228		fM	a	H	w1	3~	1~
MXH20 03	G 1 1/4	G 1	13.03	3.7	6.93	3.88	14.5	14.7
MXH20 05	G 1 1/4	G 1	14.06	3.7	7.56	4.41	20	22.2
MXH20 07	G 1 1/4	G 1	14.06	3.7	7.56	4.41	23.1	25.3
MXH30 03	G 1 1/4	G 1	13.03	3.7	6.93	3.88	14.5	14.7
MXH30 07	G 1 1/4	G 1	14.06	3.7	7.56	4.41	22	24.2
MXH50 05	G 1 1/2	G 1	15	4.65	7.56	4.41	21.3	23.1

TYPE	DN1	DN2	in		lb	
	ISO 228		fM	a	3~	1~
MXH20 10	G 1 1/4	G 1	17.83	4.65	-	38.9
MXH30 10	G 1 1/4	G 1	17.83	4.65	-	37.8
MXH30 15	G 1 1/4	G 1	17.83	4.65	40.7	42.2
MXH50 15	G 1 1/2	G 1	17.83	4.65	39.6	41.6
MXH50 25	G 1 1/2	G 1	19.41	4.65	40.3	-
MXH50 30	G 1 1/2	G 1	20.55	5.83	43.6	-

Features

Extra safety
against running dry, with the suction port above pump axis.

Reliable
All hydraulic parts in contact with the pumped liquid are of stainless steel.
For liquids from 5 °F to 230 °F.

Robust
Single-piece, thick barrel casing.

Compact
Single-piece lantern bracket and base.
Without protruding flange.

Greater protection
against leakage, with the pump casing cover separated from the motor shield.
Possibility of inspecting the seal through the side apertures between the two walls.
Greater protection against water entering the motor from outside provided by an extension of the pump casing around the lantern bracket.